REMARKS

This application has been reviewed in light of the Office Action dated November 27, 2007. Claims 1, 3-10 and 12-20 are presented for examination, of which Claims 1, 10, 19 and 20 are in independent form. Claims 2 and 11 have been canceled, and their recitations have been incorporated into the independent claims (with one change, as described below); in addition, Claims 1, 3, 5-8, 10, 12, 15, 16, 19 and 20 have been amended to define still more clearly what Applicant regards as his invention. These actions are taken without prejudice or disclaimer of subject matter. Claims 1, 10, 19 and 20 are in independent form.

In the outstanding Office Action, a number of objections were made to the specification. The changes requested by the Examiner have been made, as shown above.

Claims 1, 3, 4, 6, 8, 10, 12, 13, 15, 17, 19 and 20 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,637,849 (Maltz). In addition, Claims 2 and 11 were rejected under 35 U.S.C. § 103(a) as being obvious from *Maltz* in view of U.S. Patent 6,480,299 (Drakopoulos et al.); Claims 5 and 14, as being obvious from *Maltz* in view of U.S. Patents 6,058,207 (Tuijn et al.) and 7,102,785 (Tamagawa); Claims 7 and 16, as being obvious from *Maltz* in view of U.S. Patent 5,982,990 (Gondek); and Claims 9 and 18, as being obvious from *Maltz* in view of U.S. Patent 6,577,826 (Misaizu et al.).

Independent Claim 1 is directed to an image processing method of generating color material data for using a plurality of kinds of color materials to output an image. The method comprises inputting an image signal, determining a plurality of combinations of the plurality of kinds of color materials corresponding to the inputted image signals, and calculating the total color material use amount for each of the plurality

of combinations of the plurality of kinds of color materials. The method also comprises determining a smooth variation of the total color material use amount to a variation of a predetermined color represented by the inputted image signal and selecting the total color material use amount meeting the determined smooth variation of the total color material use amount from the determined plurality of combinations of the plurality of kinds of color materials, such that the total color material use amount fo the plurality of kinds of color materials meets the smooth function for the total color material use amount within a range of the image signal that can be inputted.

As will be apparent, Applicants have included most of the language of canceled Claim 2 in Claim 1, but instead of the phrase "all combinations of the plurality of kinds of color materials" used in Claim 2 they have adopted -- a plurality of combinations of the plurality of kinds of color materials --, in Claim 1 and in the other independent claims.

Maltz relates to determining CMY values to change color from Requested CMY to White in a CMY Color Cube in a smooth fashion while preventing the color change from jumping. However, *Maltz* does not disclose the feature of the present invention: determining a plurality of combinations of the plurality of kinds of color materials corresponding to the inputted image signals, calculating the total color material use amount for each of the plurality of combinations of the plurality of kinds of color materials, determining a smooth variation of the total color material use amount to a variation of a predetermined color represented by the inputted image signal, and selecting the total color material use amount meeting the determined smooth variation of the total color material use amount from the determined plurality of combinations of the plurality of

kinds of color materials, such that the total color material use amount of the plurality of kinds of color materials meets the smooth function for the total color material use amount within a range of the image signal that can be inputted. Since a smooth transition disclosed in Malts is that of color change from Requested CMY to White, the smoothness of the smooth transition is varied depending on colors in CMY Color Cube. On the other hand, since the smooth function of the present invention is previously determined as a smooth function of total color material use amounts within a range of the image signal that can be inputted, the smooth function of the total color material use amounts can be an accurate target.

Drakopoulos relates to selecting a combination of CMYK that shows a minimum total amount of CMY and a minimum difference between INPUT LAB and TEST LAB in a color transformation from input Lab to output CMYK. That is, the *Drakopoulos* system selects an optimum CMYK values from a plurality of CMYK in the color transformation from input Lab to output CMYK. However, Applicants submit that nothing has been found in *Drakopoulos* that would teach or suggest determining a plurality of combinations of the plurality of kinds of color materials corresponding to the inputted image signals. Accordingly, *Drakopoulos* also does not disclose calculating the total color material use amount for each of such plurality of combinations of the plurality of kinds of color materials, and selecting the total color material use amount meeting the determined smooth variation of the total color material use amount from the determined plurality of combinations of the plurality of kinds of color materials. In other words, *Drakopoulos* determines only one combination of the plurality of kinds of color materials as OUTPUT CMYK 250, because a total quantity C+M+Y+K in Drakopoulos is specified by the

CMYK output value 250 (column 25, lines 31-33). The CMYK output value 250 is outputted as one combination corresponding to one input LAB 234. Thus, *Drakopoulos* does not disclose "calculating the total color material use amount for each of the plurality of combinations of the plurality of kinds of color materials", as recited in Claim 1. Even if *Drakopoulos* is combined with *Maltz* in the manner proposed in the Office Action, therefore, and even assuming that such combination is a proper one, the result would not meet the terms of Claim 1.

Accordingly, Applicants submit that Claim 1 is allowable over *Maltz* and *Drakopoulos*.

Independent Claims 10, 19 and 20 are each either an apparatus or a computer-readable medium claim corresponding to method Claim 1, and are believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or the other of independent Claims 1 and 10, and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37

C.F.R. § 1.116. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, he is respectfully requested to contact Applicants' undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and allowance of the present application.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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